

EMC3@FTBF 2/2017

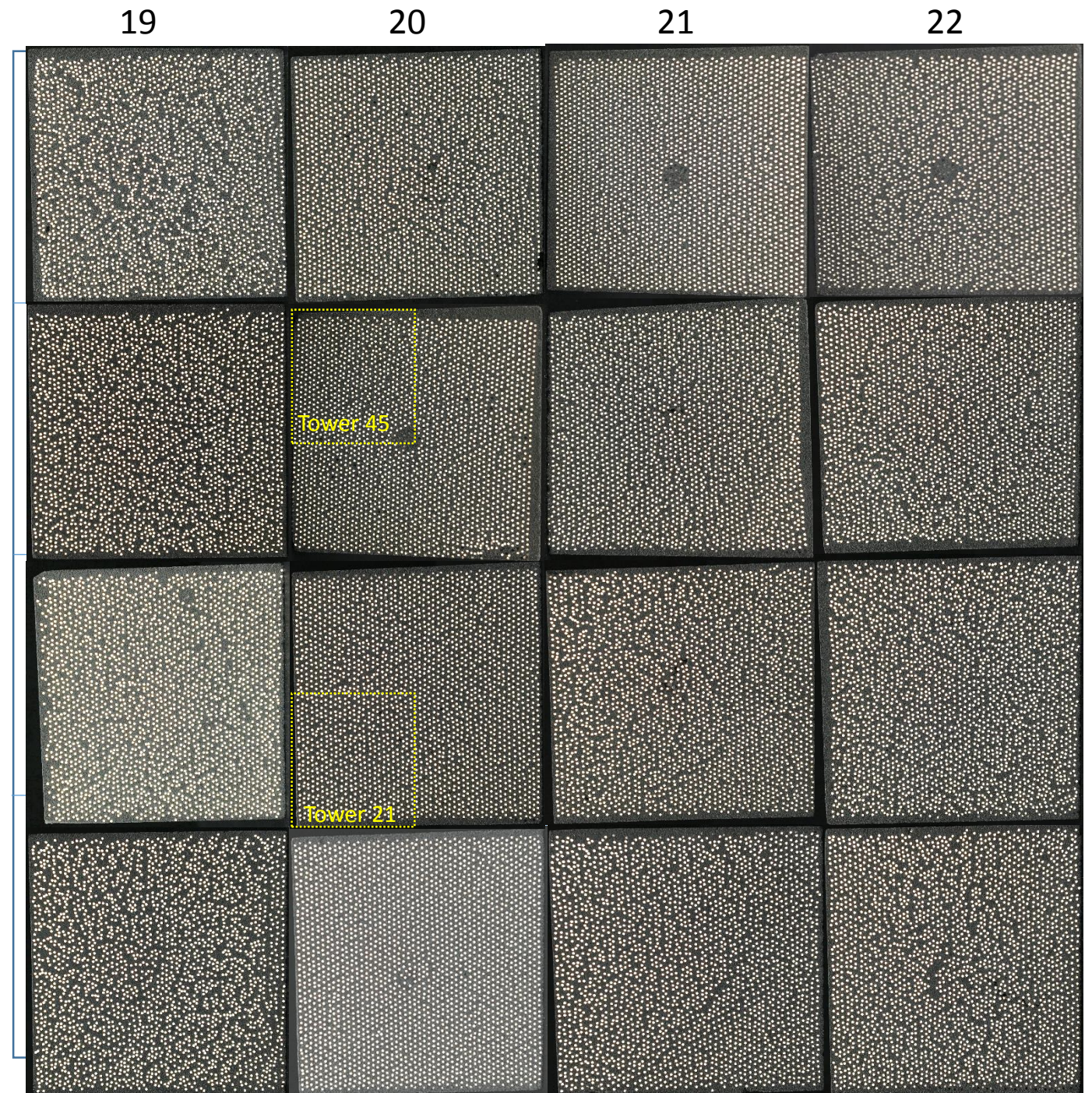
Images of fibers in blocks

Readout (small) end



- This shows a photo collage of the of the blocks that were in the EMC3 prototype.
(The collage of square images makes the gaps between blocks appear larger than they actually are.)
- All blocks were drilled and tapped before assembly into the prototype.

| | | | | |
|-----------------|-------|-------|-------|-------|
| Block ID#: | 19-1 | 20-4 | 21-2R | 22-4R |
| Density (g/cc): | 10.07 | 9.74 | 10.08 | 9.92 |
| | | | | |
| | 19-2 | 20-3R | 21-1 | 22-2 |
| | 10.00 | 10.09 | 9.83 | 9.73 |
| | | | | |
| | 19-4 | 20-1 | 21-3 | 22-3 |
| | 9.85 | 9.74 | 9.61 | 9.80 |
| | | | | |
| | 19-3 | 20-2 | 21-4 | 22-1 |
| | 9.92 | 9.63 | 9.78 | 9.78 |
| | | | | |

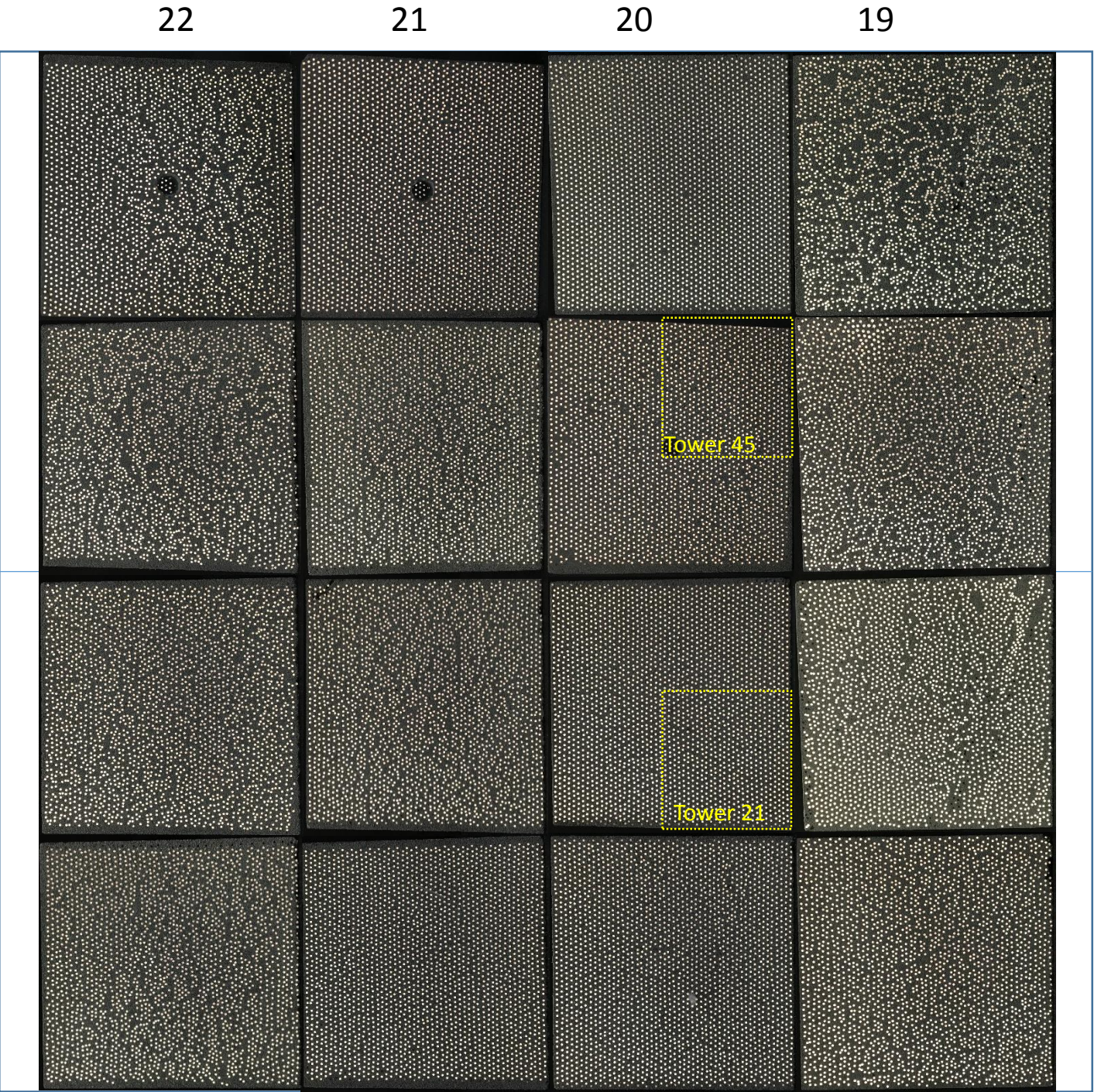


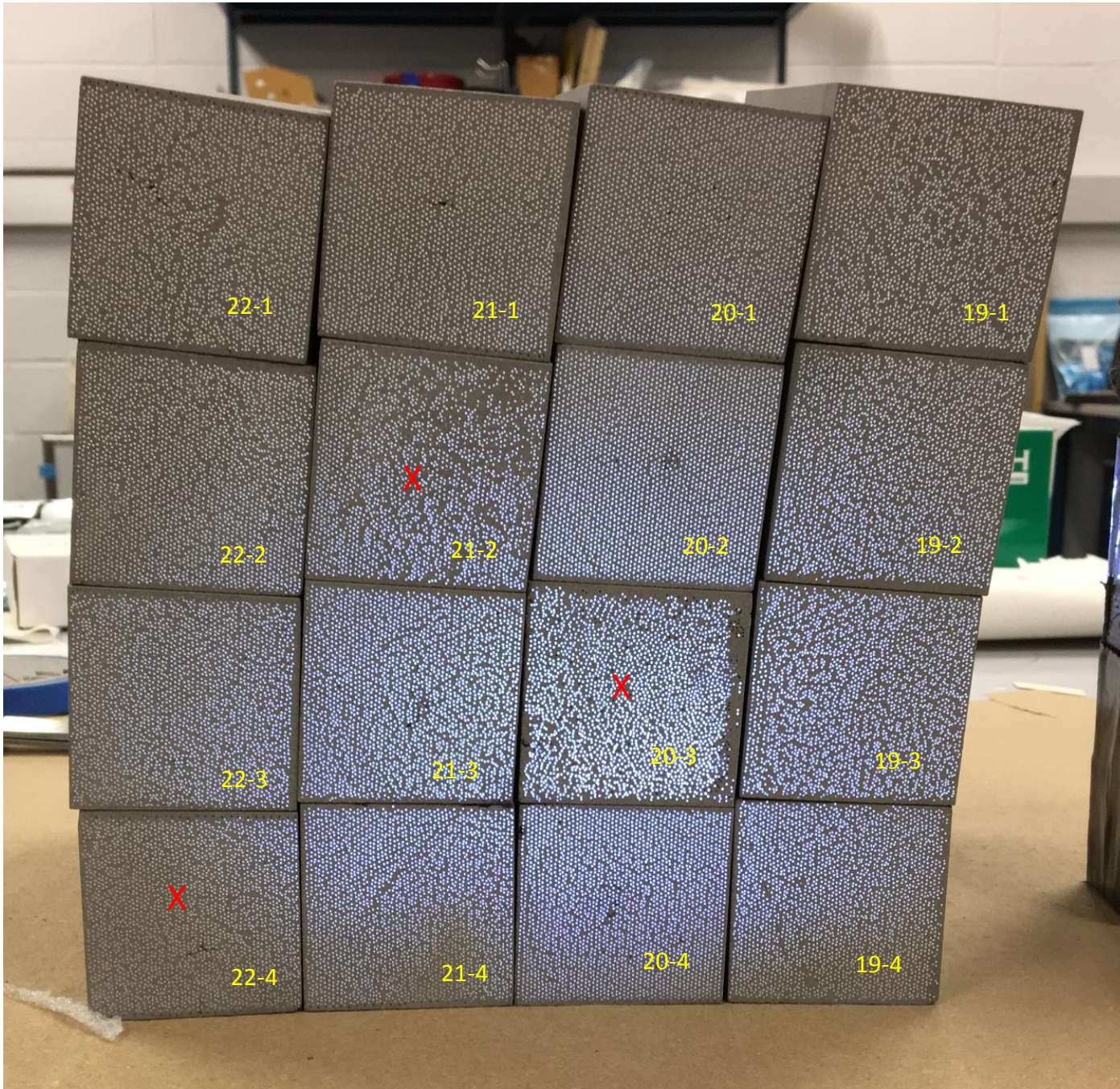
Reflector (large) end



- This shows a photo collage of the of the blocks that were in the EMC3 prototype.
(The collage of square images makes the gaps between blocks appear larger than they actually are.)
- All blocks were drilled and tapped before assembly into the prototype.

| | | | | |
|-----------------|--------------------------|-------|-------|-------|
| | looking at reflector end | | | |
| Block ID#: | 22-4R | 21-2R | 20-4 | 19-1 |
| Density (g/cc): | 9.92 | 10.08 | 9.74 | 10.07 |
| | 22-2 | 21-1 | 20-3R | 19-2 |
| | 9.73 | 9.83 | 10.09 | 10.00 |
| | 22-3 | 21-3 | 20-1 | 19-4 |
| | 9.80 | 9.61 | 9.74 | 9.85 |
| | 22-1 | 21-4 | 20-2 | 19-3 |
| | 9.78 | 9.78 | 9.63 | 9.92 |



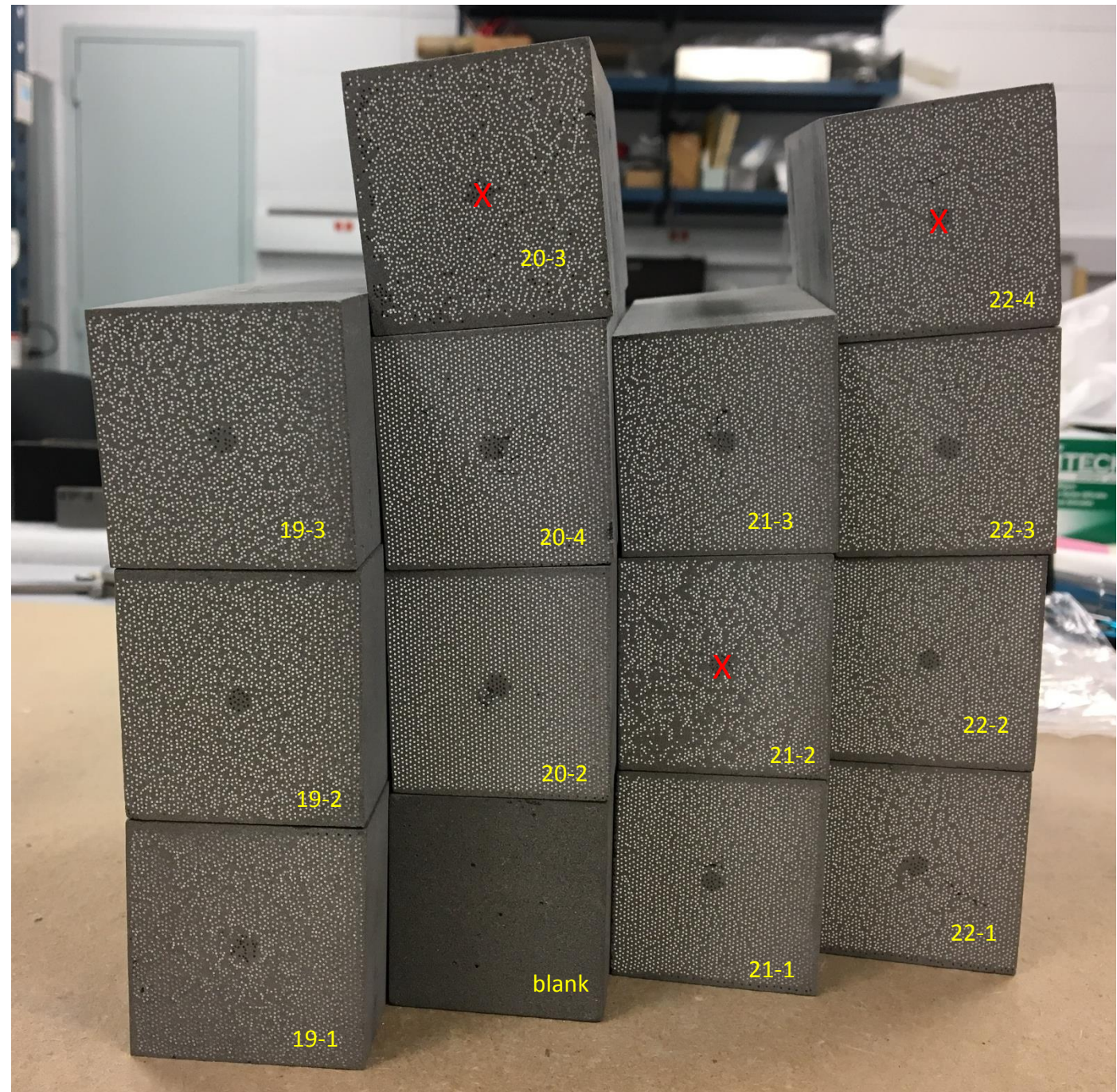


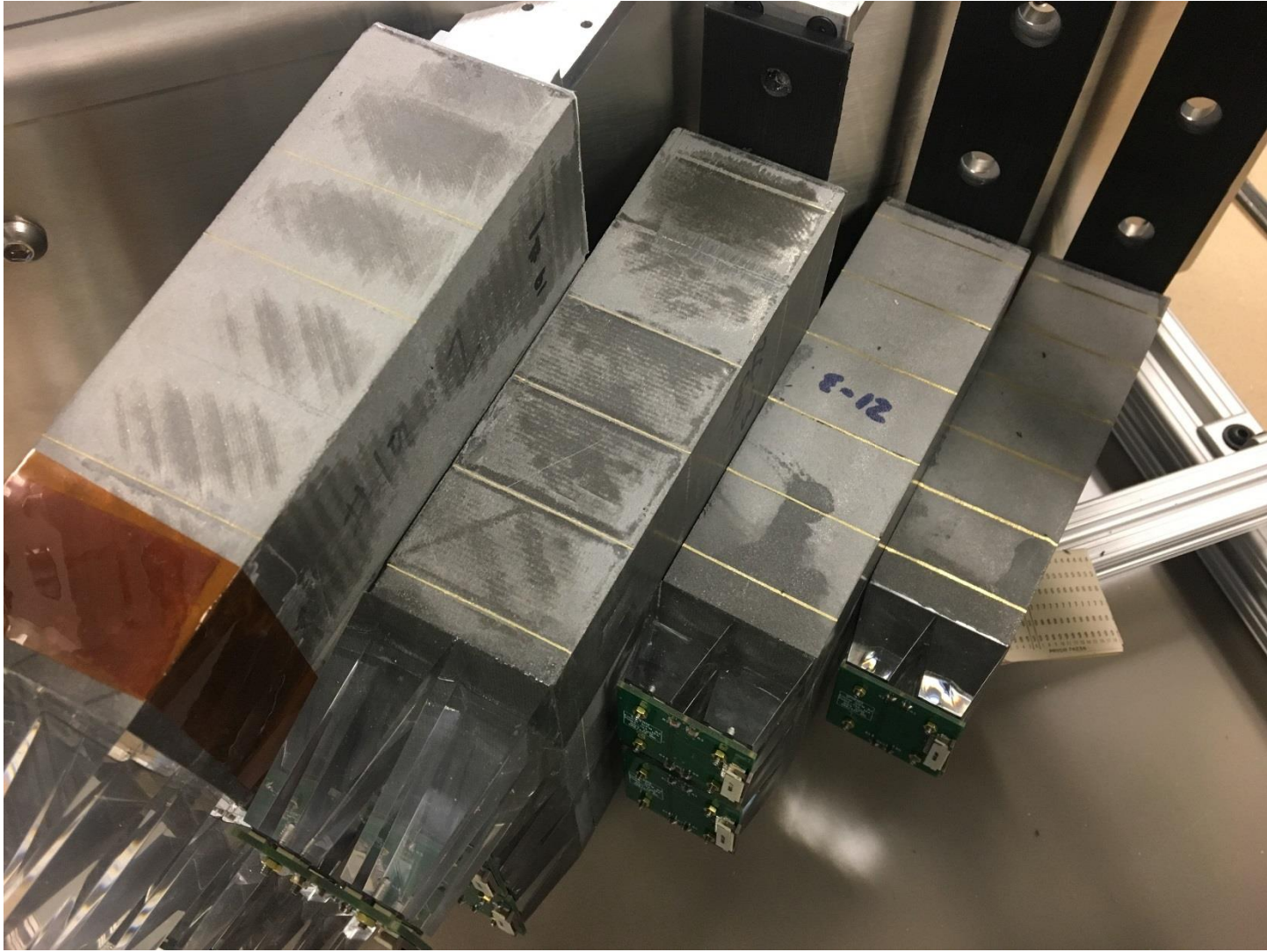
Initial “square” stack-up of blocks

- Block positions were re-arranged in final stack
- Blocks marked with “X” were later replaced
 - 20-3 (non-uniform fibers)
 - 21-2 (non-uniform fibers)
 - 22-4 (lowest density: 9.56 g/cc)

Initial staggered stack-up of drilled/tapped blocks

- Block positions were re-arranged in final stack
- Blocks marked with “X” were replaced
 - 20-3 (non-uniform fibers)
 - 21-2 (non-uniform fibers)
 - 22-4 (lowest density: 9.56 g/cc)





EMC4 Prototype

| | | | | |
|----------------|------|------|--------|--------|
| | EMC4 | | | |
| block # | 22-4 | 21-2 | 19-SG2 | 19-SG1 |
| density (g/cc) | 9.56 | 9.75 | 9.11 | 9.23 |

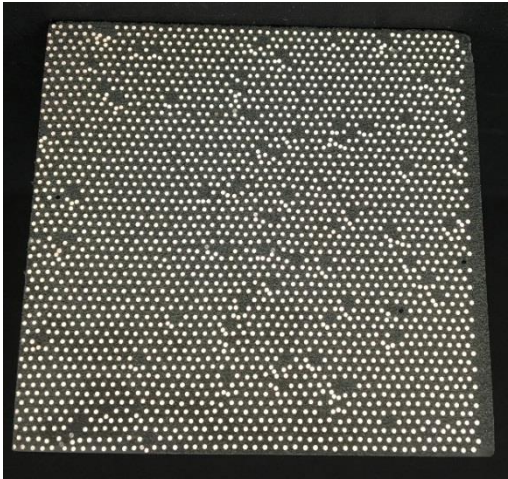
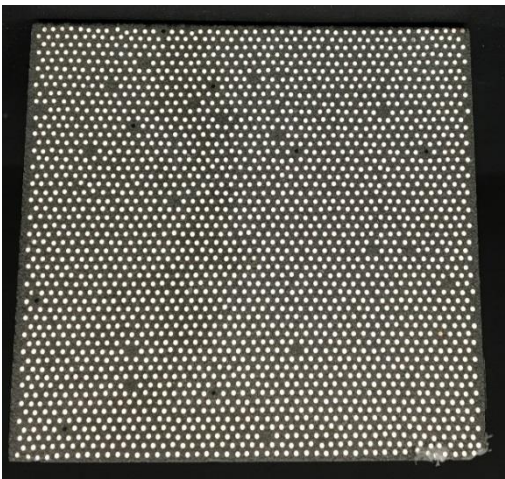
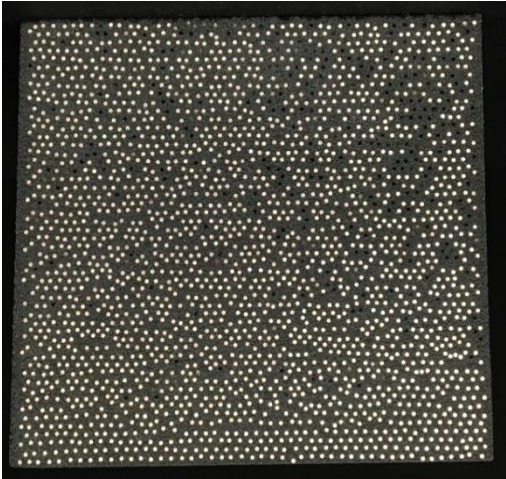
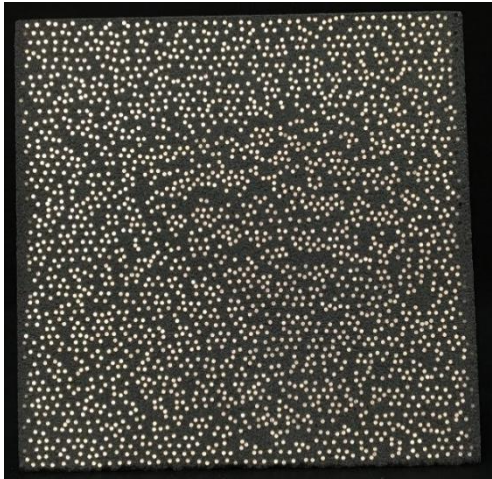
22-4

21-2

19-SG1

19-SG2

Wide
end



Narrow
end

